

CLAIMS:

WHAT IS CLAIMED IS:

- 1.(Currently Amended) A mobile station MS comprising:
 - an interface to receive a media sample;
 - a processor to extract ~~at least one feature~~ a first set of features from a digital version of the media sample;
 - a transmitter to transmit the ~~at least one extracted feature~~ extracted first set of features over a wireless communication link,
 - a receiver for receiving a request message over the wireless link that requests additional features;
 - wherein the processor is automatically responsive to the request message to extract a second set of features from the digital version of the media sample and the transmitter is further to transmit the extracted second set.
- 2.(Original) The MS of claim 1 wherein the interface comprises a transducer.
- 3.(Original) The MS of claim 2 wherein the transducer comprises a microphone and the media sample comprises an audio sample.
- 4.(Original) The MS of claim 2 wherein the transducer comprises a camera and the media sample comprises a visual sample.
- 5.(Original) The MS of claim 1 wherein the interface comprises one of a cable and a wireless link.
- 6.(Original) The MS of claim 5 wherein the media sample that the interface receives is the digital version.
- 7.(Original) The MS of claim 1 wherein said transmitter is further to transmit a message that includes the at least one extracted feature and no portion of the digital version of the media sample.

8.(Original) The MS of claim 1 wherein the processor is further to adaptively select a number of features to extract based on the digital version of the media sample.

9.(Original) The MS of claim 1 wherein the processor is further to adaptively select at least one type of feature to extract based on the digital version of the media sample, the processor extracts at least one feature of the adaptively selected type, and wherein the transmitter is further to transmit an identifier of the selected type of feature.

10-11.(Canceled)

12.(Currently Amended) The MS of claim 1 further comprising a user interface ~~by which a user may initiate the processor to so extract~~for causing the transmitter to transmit the first set of features, and a buffer to store at least a portion of the digital version of the media sample ~~prior to the user so initiating, wherein the processor extracts at least some of the first set prior to a user input at the said user interface.~~

13.(Currently Amended) ~~The MS of claim 1 wherein the at least one feature defines a timepoint within the digital version of the media sample, A mobile station MS comprising:~~
an interface to receive a media sample;
~~the a processor is to extract a plurality of n timepoints from the digital version of the media sample, and the transmitter is to transmit at least n spectral slices of the digital version of the media sample; and~~
a transmitter to transmit a plurality of messages over a wireless communication link, each message comprising at least one timepoint, a spectral slice, and an identifier that links each the spectral slice to at least one the timepoint.

14.(Currently Amended) The MS of claim 13 wherein each ~~($n+1$)~~ spectral slice of subsequent messages corresponds to a larger portion of the digital version of the media sample than a ~~preceding n^{th} spectral slice of a preceding message.~~

15.(Currently Amended) The MS of claim 13 further comprising a receiver for receiving a sample identification message, and the processor is further to terminate transmitting further

timepoints and spectral slices of the said media sample in response to receipt of the sample identification message.

16.(Currently Amended) The MS of claim 1 further comprising a user interface by which a single user input initiates: the processor to extract the ~~at least one feature~~ first set of features, a wireless communications link to be established between the MS and a communication service, and the ~~at least one~~ extracted ~~feature~~ first set of features to be transmitted over the wireless communications link.

17.(Original) The MS of claim 16 wherein the single user input further initiates a buffer disposed between the transducer and the processor to begin storing at least a portion of the digital version of the media sample.

18.(Currently Amended) The MS of claim 1 wherein the ~~processor is to extract a series of first and second sets of features comprise~~ MPEG-7 descriptors ~~from the digital version of the media sample~~.

19.(Currently Amended) The MS of claim 1 wherein the ~~at least one feature~~ first set of features is non-reconstructive of the digital version of the media sample.

20.(Currently Amended) The MS of claim 1 wherein ~~all extracted features for which the transmitter is to transmit~~ the first and second sets of features, in combination, are non-reconstructive of the digital version of the media sample.

21.(Canceled)

22.(Currently Amended) The MS of claim 21 ~~further comprising a receiver to receive a request for further features message, wherein, in response to receiving said request message, the processor extracts at least a second feature from said at least a portion stored in the buffer; and further wherein the transmitter transmits the at least second feature 1, wherein the request message specifically identifies each additional feature at least by type, and the second set of features comprises only features of the said identified type.~~

23.(Currently Amended) A computer program, embodied on a computer readable medium within a mobile station, to process a media sample comprising:

a first set of computer instructions to extract ~~at least one feature~~ in response to a user input a first set of features from a digital media sample, and to extract in response to a received request message a second set of features consistent with additional features that are requested in the request message; and

a second set of computer instructions to transmit in separate messages the ~~at least one extracted feature~~ first and second sets of extracted features over a wireless communications link.

24.(Currently Amended) The computer program of claim 23 wherein ~~the second set of computer instructions is further to transmit a message carrying the at least one extracted feature and~~ said separate messages comprise features but no portion of the digital media sample.

25.(Currently Amended) The computer program of claim 23 wherein the request message specifies a number of additional features, and the first set of computer instructions is to adaptively select ~~a number of the second set of features to extract based on the digital media sample, and extracting the selected comprising the specified number.~~

26.(Currently Amended) The computer program of claim 23 wherein
the first set of computer instructions is to adaptively select a type of feature to extract based on the ~~digital media sample~~ request message and to extract ~~at least one feature the first set of features~~ of the adaptively selected type, and
———~~the second set of computer instructions is to transmit the at least one extracted feature and an identifier of the selected type of feature.~~

27.(Currently Amended) The computer program of claim 23 wherein
the first set of computer instructions is to extract the first set of features from a first time-bounded segment of the digital media sample, and
the second set of computer instructions is to transmit a second time-bounded segment and not the first time-bounded segment with the first set of features.

28-29.(Canceled)

30.(Currently Amended) The computer program of claim 23 wherein the at least one feature defines a timepoint, the first set of computer instructions is to extract ~~a plurality of n timepoints~~ at least one timepoint from the digital media sample, and ~~the second set of computer instructions is to transmit at least n one of said messages comprises a timepoint, a~~ spectral slices of the digital media sample and an identifier that links each the spectral slice to at the timepoint.

31-34.(Canceled)

35.(Currently Amended) The computer program of claim 23 wherein the first set of ~~computer instructions is to extract at least one feature from a digital media sample that~~ features is non-reconstructive of that digital media sample.

36.(Canceled)

37.(Currently Amended) A computer program embodied on a computer readable medium to uniquely match a plurality of extracted features to a feature set stored in a database comprising:

a first set of computer instructions to separately receive over a network a first and a second message that includes first and second sets of received features, respectively;

~~a second set of computer instructions to extract additional features from the message;~~
and

a ~~third~~second set of computer instructions to search a database of feature sets ~~until a plurality of received features combined with extracted additional features uniquely matches only one feature set of the database for all matching sets that match the first set of received~~ features and to determine a second set of at least one additional feature that distinguishes among each of the matching sets;

a third set of computer instructions to transmit over the network a request message that stipulates the second set of additional features; and

a fourth set of computer instructions to uniquely identify one feature set from among the matching sets using the second set of received features.

38.(Currently Amended) The computer program of claim 37 wherein each feature set is associated with a media file title, the computer program further comprising a ~~fourth~~ fifth set of computer instructions to transmit, over the network to a sender of the message, a reply message that includes the media file title.

39.(Canceled)

40.(Currently Amended) The computer program of claim 38 wherein the ~~third~~ fourth set of computer instructions further is to determine a link address for a media file uniquely associated with the ~~only one~~ uniquely identified feature set, and wherein the ~~fourth~~ fifth set of computer instructions is further to transmit the link address in the reply message.

41-46.(Canceled)

47.(Currently Amended) The computer program of claim ~~46~~ 37 wherein the request message includes at least one of a number of additional features and a type of the ~~further features~~ at least one additional feature.

48.(Currently Amended) A mobile station comprising:
means for receiving a media sample;
processing means for extracting at least one feature from a digital version of the media sample, said processing means responsive to a user input to extract a first set of features and responsive to a request message identifying additional features to extract a second set of features consistent with the identified additional features;
means for transmitting the ~~at least one extracted feature~~ first and second sets of features in separate messages over a wireless communication link; and
means for receiving the request message.

49.(Previously Presented) The mobile station of claim 48, wherein the means for receiving comprises a transducer, and the means for extracting comprises a digital processor.

50.(Currently Amended) A method for signaling information about a media file to a remote database, comprising:

at a portable wireless device, receiving a media sample;

at the portable wireless device, extracting a first plurality of features from a digital version of the media sample;

transmitting from the portable wireless device a message that includes the extracted first plurality of features ~~and that excludes the digital version of the media sample;~~

receiving at the portable wireless device a request message requesting at least one additional feature;

at the portable wireless device, extracting at least one extra feature consistent with the request message; and

transmitting from the portable wireless device a message that includes the extracted extra feature.